

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently Amended) Process for anticipating and/or preventing a risk of spontaneous ignition and/or explosion of an explosive atmosphere in a confined or semi-confined environment chosen from a group consisting of a grain silo, a center for storing coal dust, industrial dusts, animal or plant meals or fertilizers, driftways and fuel tanks optionally incorporated in a vehicle, in which a temperature of a mixture and any change over time are measured from the a time of creation of said atmosphere, and the a critical moment of spontaneous ignition and/or explosion of this the mixture is determined by determining the an induction time remaining to go, that is to say the time elapsed between the creation of said atmosphere and the critical moment beyond which there is a risk of said atmosphere spontaneously igniting and/or exploding.
2. (Previously Presented) Process according to Claim 1, wherein the fertilizers are chemical fertilizers or ammonium nitrates.
3. (Previously Presented) Process according to Claim 1, wherein the fuel tanks are tanks of hydrocarbons chosen from the group consisting of kerosene, petroleum spirit, methane, butane and propane.
4. (Currently Amended) Process according to Claim 1, wherein the hydrocarbon fuel tanks is-a truck, aircraft or boat tanks.
5. (Previously Presented) Process according to claim 1, wherein use is made of alarm means or means for preventing spontaneous ignition and/or explosion of said atmosphere when the time elapsed from the moment of creation of said atmosphere approaches the critical moment of spontaneous ignition.

6. (Previously Presented) Process according to claim 5, wherein the implementation of the alarm means and/or means for preventing spontaneous ignition and/or explosion of said atmosphere is engaged manually or automatically.

7. (Currently Amended) Process for preventing a risk of spontaneous ignition of an atmosphere of an environment selected from a group consisting of silo, a center for storing coal dust, industrial dust, animal or plant flours or fertilizers, driftways and fuel tanks optionally incorporated in a vehicle,

wherein the atmosphere being approximately at ambient temperature, an induction time before spontaneous ignition and/or explosion is determined through a measurement of an initial temperature of the atmosphere at a time of creation of said atmosphere.

8. (Previously Presented) Process according to claim 7, wherein the ambient temperature variation over time is measured.

9. (Previously Presented) Process according to claim 7, wherein the atmosphere comprises gas, vapors, mists, dusts, emulsions or combustible grains, mixed or in contact with oxygen or air.

10. (Previously Presented) Process according to claim 7, wherein the atmosphere is in a confined or semi-confined environment.

11. (Previously Presented) Process according to claim 10, wherein the atmosphere is in a flat silo or in contact with a surface of semi-confined bulk storage.

12. (Previously Presented) Process according to claim 7, wherein the fertilizers are chemical fertilizers or ammonium nitrates.

13. (Previously Presented) Process according to claim 7, wherein the fuel tanks are storage tanks of hydrocarbons chosen from the group consisting of kerosene, fuels, methane, butane and propane.
14. (Previously Presented) Process according to claim 13, wherein the hydrocarbon tank is a truck, aircraft or boat tank.
15. (Previously Presented) Process according to claim 7, wherein use is made of alarm means for preventing spontaneous ignition and/or explosion of said atmosphere when the induction time elapsed from the moment of creation of said atmosphere approaches the critical moment of spontaneous ignition.